

MISCELLANEOUS NOTES

light on its possible chances of survival in the changed habitat.

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RAT DESTRUCTION ESTABLISHMENT,  
B.M.C., HAFFKINE INSTITUTE,  
PAREL, BOMBAY-400 012,  
February 4, 1985.

R. P. HEMKAR

REFERENCE

ELLERMAN, J. R. (1961): Fauna of British India, Mammalia, Vol. III. Rodentia part 2 B 84 + 1 ii  
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5. THE BIOLOGY OF COLLARED PIKA, *OCHOTONA RUFESCENS*,  
WITH REFERENCE TO ORCHARDS OF BALUCHISTAN  
(PAKISTAN)

METHODS AND MATERIALS

41 individuals were kill trapped (size 17.5 × 9.5 cm) from orchards of Ziarat and Choatair (altitudes above 2300 m, sharing characteristic *Juniperus macropoda* forests) valleys during May and July, 1984. Each individual was weighed and sexed. Females were checked for plugged vagina, and uteri examined for

pregnancy status. The number and weight of the embryo and number of the uterine scars was recorded. The activity of ovaries was judged on the basis of their visibility. The population levels were judged through trap success.

RESULTS AND DISCUSSION

Table 1 presents the trap success exhibited by the different samples. The overall trap suc-

TABLE 1

TRAP SUCCESS IN DIFFERENT SEXES IN THE SAMPLE OF *Ochotona rufescens* COLLECTED FROM ZIARAT AND CHOATAIR DURING SPRING AND SUMMER

Locality	Spring			Summer			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ziarat	5.00	3.61	1.39	3.06	2.78	0.28	4.14	3.28	0.86
Choatair	6.47	4.04	2.43	1.25	1.25	0.00	3.64	2.73	0.91
Total	5.10	3.53	1.57	2.87	2.67	0.21	3.98	3.11	0.87

cess is higher in the spring sample (May, 5.10) than the summer (July, 2.87). This can be explained on the basis of a higher activity level exhibited by the species during May as compared with July. Our results largely agree with Roberts (1977) suggesting that in Baluchistan this species is more industrious during March/April, when growth of the new vegetation is at maximum, and becomes rather less active during June/July. The higher trap success exhibited by the May-sample from Choatair (6.47) as compared with that from Ziarat (5.00) can be explained on the same basis, Choatair being located at higher altitude is expected to have a late ensuing of spring. The overall trap success is, however, higher in Ziarat (4.14) than in Choatair (3.64), suggesting that the general population level of the species is higher at Ziarat. The trap success regarding overall sample of the two localities may yield some direct constant for the general population level, different interacting factors producing a uniform vulnerability to trapping.

The data on the distribution of males and females in the samples collected from the two

localities and in two seasons as well as in the overall sample (Table 2) indicates a relative preponderance of the males. The non significant heterogeneity sex chi square suggests that all the samples are essentially similar. This may be explained on the basis that either males are more active/more attracted towards some novel items (traps) or conversely females have a limited home range.

All the nine females trapped weighed more than 180 g, generally placed in the older adult class, while the lower weight classes were represented by males only. In fact 1:1 sex ratio was maintained in the older adult class, suggesting that females of older class are as active as males.

The presence of visible ovaries in all females support the previous observations that the species is reproductively active during summer months (Roberts 1977). The presence of reproductively active females in our May-sample suggest that the reproductive activity in the area may extend upto May and two clear cut reproductive episodes, as previously suggested may not be very faithfully adhered to. There may be considerable longer reproductive

TABLE 2

DISTRIBUTION OF MALES AND FEMALES IN THE SAMPLE OF *Ochotona rufescens* COLLECTED FROM ZIARAT AND CHOATAIR DURING SPRING AND SUMMER. CHI SQUARE (APPEARING IN PARENTHESIS) HAS BEEN CALCULATED AFTER APPLICATION OF YATE'S CORRECTION OF CONTINUITY

Locality	Spring			Summer			Total		
	Male	Female	Sex Ratio	Male	Female	Sex Ratio	Male	Female	Sex Ratio
Ziarat	13	5	2.60:1 (2.722)	10	1	10.0:1 (5.818)	23	6	3.83:1 (8.828)
Choatair	5	3	1.67:1 (0.125)	4	0	4.0:1 (2.250)	9	3	3.00:1 (2.083)
Total	18	8	2.25:1 (2.722)	14	1	14.0:1 (6.857)	32	9	3.56:1 (2.805)

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period, mainly determined by the availability of favourable vegetation.

The number of embryos recorded from two females averaging around 7 largely go in conformity with Roberts (loc. cit.), suggestion that the species is a rather prolific breeder in the area.

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REFERENCE

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6. A NOTE ON 'EAR-SORE' IN SARISKA WILDLIFE SANCTUARY, RAJASTHAN

(With a photograph)

Ear-sore has been reported from nilgai in Gir, Gujarat by Hiregoudar (1974); and is frequently reported from cattle, domestic buffalo and elephant in many parts of India, (Hiregoudar and Chatupale 1965, Hiregoudar 1974). Casual observation of nilgai in Sariska Wildlife Sanctuary, Alwar, Rajasthan in 1984 (March, May, November) and again in 1985 (July and November), showed a high proportion of animals with such a condition. As previous notes did not comment on the prevalence of the infection in wild populations, the opportunity is now taken to do so.

Ear-sore was readily observable in the stationary animal, as black and red scabs and sores on the inner proximal part of the ear pinna. Three degrees of infection were distinguished:

- a) Light infection: No apparent loss of ear tissue, the pinna margins still rounded and smooth. Minor scabs and darkening of skin, some exudate and thickening of pinnae.

- b) Medium Infection: Outer edge of pinna is torn and ragged, considerable thickening of tissue, large scabs and sores, black and red exudate.
- c) Severe infection: As above but with considerable loss of tissue, on occasion up of half the pinna had been destroyed.

Photograph shows a male nilgai with an obvious severe infection.

TABLE 1

INCIDENCE OF EAR-SORE AMONGST NILGAI IN SARISKA W.L.S. 1984

Category	No. examined	No. infected	Early	Medium	Severe
Male adult	21	16	4	7	5
Female adult	26	18	6	9	3
Subadult	22	11	11	0	0
Total	69	45	21	16	8
Percentage		65%	30%	23%	12%